

## What is claimed is

1. A method of regulating TCP/IP connection requests which await service in a system by a TCP/IP connection control table to prevent overload thereof, said method comprising the steps of:

- a) monitoring usage of said system on a dynamic basis,
- b) based upon said usage, dynamically computing a time-out value  $T_{ho}$  which defines the time duration that a TCP connection request may await service by said system, and
- c) removing from said TCP/IP connection control table all TCP/IP connection requests which have been awaiting service in said TCP/IP stack for a duration exceeding  $T_{ho}$

2. A method as set forth in Claim 1, wherein said TCP/IP connection control table has size  $N_{size}$  and an upper bound for usable table size of  $N_{abs} \leq N_{size}$ , and where values of  $T_{ho}$  are dynamically computed in a range  $[T_{min}, T_{max}]$

3. A method as set forth in Claim 2, comprising the steps of:

- i) setting  $T_{ho} = T_{min}$  when  $N > N_{abs}$ ,
- ii) when  $N > N_{limit}$  setting  $T_{ho} = \max \{T_{min}, T'_{ho}/A\}$ , where  $T'_{ho}$  is a previously existing value of  $T_{ho}$ , where  $A > 1$ , where  $N$  is the current usage of the table, and where  $0 \leq N_{limit} \leq N_{size}$ , and
- iii) when  $N \leq N_{limit}$ , setting  $T_{ho} = \min \{T_{max}, A * T'_{ho}\}$ .

4. A method as set forth in Claim 2, comprising the steps of:

- a) defining a plurality of table usage value  $N_i$  spanning an increasing range of  $N_i = 0$  to  $N_i = N_{size}$ ,

- b) associating a corresponding plurality of time durations  $T_i$  spanning a decreasing range of  $T_i=T_{\max}$  to  $T_i=T_{\min}$ , and
  - c) comparing current table usage  $N$  to  $N_i$  and setting  $T_{ho}$  to a corresponding value  $T_i$ .
5. A method as set forth in Claim 2, wherein  $T_{\min}$  has a value in a range of 0.01 to 1.0 secs. and wherein  $T_{\max}$  has a value in a range of 60 to 120 secs.